2012

Attachment styles and anorexia nervosa: a literature review

Lauren Battaglia
Loyola University

Carolyn McNamara Barry
Loyola University

Follow this and additional works at: <https://scholar.utc.edu/mps>

Part of the [Psychology Commons](#)

Recommended Citation

Battaglia, Lauren and Barry, Carolyn McNamara (2012) "Attachment styles and anorexia nervosa: a literature review," *Modern Psychological Studies*: Vol. 17 : No. 2 , Article 8.
Available at: <https://scholar.utc.edu/mps/vol17/iss2/8>

This articles is brought to you for free and open access by the Journals, Magazines, and Newsletters at UTC Scholar. It has been accepted for inclusion in Modern Psychological Studies by an authorized editor of UTC Scholar. For more information, please contact scholar@utc.edu.

Attachment Styles and Anorexia Nervosa: A Literature Review

Lauren Battaglia
Loyola University

Carolyn McNamara Barry
Loyola University

Carolyn McNamara Barry PhD
Beatty 212 Department of Psychology
Loyola University Maryland
Baltimore, MD 21210
Phone: 410-617-5325
Email: CBarry@loyola.edu

Abstract

Anorexia nervosa affects about 1.8 million women in the United States of America. Aside from the direct effects of the disorder, which includes detrimental weight loss, there are a number of related physical effects that are strongly correlated, some of which can be fatal (Birmingham & Treasure, 2010). Research on the etiologies of the disorder has indicated numerous factors ranging from neurobiological to psychological to social. In this paper we focus on the link between parent-child attachment styles and anorexia nervosa. In particular, parental care, connectedness, and control are examined. We also explore the mediating variables (e.g., core beliefs and defense styles) between this link. Lastly, we discuss future research directions, such as the examination of under-studied anorexic populations of male athletes.

Keywords: attachment, anorexia, parental care, control

Introduction

Anorexia nervosa manifests itself as a “constant, inexplicable fear of being fat or eating, which increases with weight loss and does not change with reason” (Birmingham & Treasure, 2010, p. 1). Thus, those who suffer from this disorder are usually below 85% of their normal body weight (Birmingham & Treasure, 2010). A large number of people experience these frightening symptoms as anorexia nervosa is the most common psychiatric diagnosis in women in the United States. Roughly 1-2% of American women are diagnosed with the disorder, which amounts to about 1,800,000 women (Birmingham & Treasure, 2010). In continuance, anorexia nervosa can cause and is related to a vast multitude of physical health-related issues. Many anorexics suffer from cardiac irregularities, such as bradycardia, hypertension, and cardiac arrhythmias due to an insufficient level of protein-caloric intake. In addition, those with the disorder often experience gastrointestinal effects, electrolyte imbalance, amenorrhea, thyroid dysfunction, osteoporosis, bone fractures, dental erosion, and many other related ailments (Elder, Evans, & Nizette, 2009). Not only can the disorder cause deficits in one’s health, but it has the ability to be fatal. In fact, anorexia nervosa has the highest mortality rate of all psychiatric conditions with a “standardized mortality rate approximately ten times

that of the general population” (Birmingham & Treasure, 2010, p.1).

Henceforth, anorexia nervosa is an important topic of research as the disorder effects many individuals and causes severe physical symptoms and even death. Through the years researchers have posed different explanations for the manifestation of the disorder. Some research suggests the manifestation is associated with neurobiology, while others propose it may manifest itself as a coping mechanism for struggles in developing a personal identity (Gorman & Gorman, 2004; Polivy & Herman, 2002). Though these suggestions are plausible, it seems the vast majority of research emphasizes the association between parental attachment styles and anorexia nervosa (Canetti, Kanyas, & Lerer, 2008; Laporte & Guttman, 2007; Leung, Thomas, & Waller, 2000; Orzolek-Kronner, 2002; Patching & Lawler, 2008; Swanson, Power, Collin, et al., 2009). As Bowlby (1988), renowned attachment style theorist, states “successful parenting is a principle key to mental health of the next generation” (p. 1). Therefore, it is imperative to investigate the link between anorexia nervosa and parental attachment styles. This review first defines styles of parental attachment and examines why these styles would influence the manifestation of the eating disorder. Furthermore, it explores the diverse facets of attachment styles, such as level of parental connectedness, care, and control and maternal versus

paternal attachments. In continuance, it examines mediating variables of the relation between parent-child attachment and anorexia, as well as the role of genetics in the development of this disorder. The review makes logical suggestions as to how the information presented can be used as an aid in developing prevention strategies to decrease the prevalence of anorexia nervosa amongst the population. Lastly, it acknowledges the limitations of the research and discusses, in addition to the aforementioned, various implications of the findings.

Overview of Attachment Styles

Attachment can be defined as being “strongly disposed to seek proximity to and contact with a specific figure and to do so in certain situations” (Bowlby, 1982, p. 371). Most children become attached in some way to a caregiver as they are forced to be dependent on a more capable being. The attachment qualities range from secure to insecure, and have been assessed in an experimental paradigm as developed by Ainsworth, Blehar, Waters, and Wall (1978). They find that children who are able to use their caregiver as a secure basis from which to explore their environment are designated secure. In contrast, children who are unable to use their primary caregiver as a secure base from which to explore are designated as insecure. In fact, they documented that secure attachments are accompanied by high levels of care and control and the less secure attachments are accompanied by low levels of care and inappropriate levels of control. Bowlby (1982) has long theorized that the attachments that one forms with the caregiver influences the development of the individual throughout their life course, and the wealth of literature on attachment has provided empirical support for this contention (for a review, see Cassidy & Shaver, 2008).

Connecting Attachment Styles to Anorexia Nervosa

For purposes of this review, it is imperative to understand how attachment styles are associated with anorexia nervosa. The onset of the disorder most often occurs in adolescence, on average at 15 years of age (Birmingham & Treasure, 2010). In a parallel fashion, adolescence is considered a sensitive period for developing autonomy, which is mediated by parental attachment styles (Zimmerman, Mohr, & Spangler, 2009). Attachment styles have been shown to influence a wide range of psychological, cognitive, and social developmental outcomes including the likelihood of a mental health disorder (Cassidy & Shaver, 2008). It is logical to link manifestation of anorexia and attachment styles together. This notion has been examined methodologically and research illustrates that levels of

parental control, personal autonomy, parental connectedness and parental care are crucial factors in the manifestation of anorexia nervosa (Canetti, Kanyas, & Lerer, 2008; Laporte & Guttman, 2007; Leung, Thomas, & Waller, 2000; Orzolek-Kronner, 2002; Patching & Lawler, 2008; Swanson et al., 2009).

Connectedness. Specifically, parental connectedness is characterized by reciprocity, trust, dependency, bonding, and communication (Barber & Mikles-Schulterman, 2008). Leung et al. (2000) and Orzolek-Kronner (2002) investigated the association between parental connectedness and anorexia nervosa. Parental connectedness was measured by obtaining participants' scores on the Parental Bonding Instrument (PBI), Inventory of Peer and Parental Attachment (IPPA) and Parental Attachment Questionnaire (PAQ). The scores of the young women with anorexia were compared to the scores of young women without (a non-clinical sample), and both studies found that anorexics more often report feeling disconnected from family, friends, and loved ones than do those not diagnosed with the disorder. Hence, the researchers suggest there seems to be a strong association between anorexia and parental connectedness in the context of parental attachment (Leung et al., 2000; Orzolek-Kronner, 2002).

Parental Care. In continuance, parental care can be defined as the “amount of effort delivered to the young” (Winkler, 1987, p. 527). Many researchers utilized the PBI to measure level of perceived care among the anorexics as there are 12 specific items on the instrument which evaluate this construct on a continuum from care and involvement to indifference and rejection (Canetti et al., 2008; Leung, Thomas, & Waller, 2000; Parker, Tupling, & Brown, 1979; Swanson et al., 2009). Again, the results from CITE for the anorexic sample were compared to a non-clinical sample and the researchers found that, on average, anorexics perceive both parents as less caring than do those of the non-clinical sample. In addition, Canetti et al. (2008) explored the reality that grandparents' attachment may be salient to the individual. Indeed they found, through use of the PBI, that less perceived grandparental care also was associated with anorexia nervosa and other related eating disorders. Hence, these findings highlight an inverse association between levels of parental care and anorexia nervosa.

Parental Control. In addition, much research emphasizes the importance of parental control and its association with the disorder. This construct is particularly important because many anorexics often report stringently controlling the food which they consume because they lack the autonomy to control

other aspects of their life as a result of strict parental control (Patching & Lawler, 2008). Accordingly, parental control is often defined as the restriction of psychological and behavioral freedom imposed on a child (Laporte & Guttman, 2007). To explore this construct, researchers utilized the PBI which has 13 items directly related to parental control and measures the construct on a continuum from granted autonomy to restricted control (Canetti et al., 2008; Laporte & Guttman, 2007; Parker et al., 1979). In addition to the PBI, Laporte and Guttman (2007) utilized semi-structured interviews to ask the participants to elaborate on their responses and related topics. Canetti et al. (2008) found that though anorexics perceive both parents as less caring than does the non-clinical sample, only the father's parental control was found to have a significant association with the disorder. However, Laporte and Guttman (2007) found that anorexics specifically experience more maternal denial of behavioral freedom than does the non-clinical sample. Though there is a disparity in specific findings, one can conclude that in general parental control is associated with anorexia nervosa.

In continued exploration, Orzolek-Kronner (2002) investigated the specific way in which parental attachment styles could be associated with anorexia nervosa by examining proximity-seeking behavior. This behavior is manifested in the context of parental attachment when the child behaves in ways to summon the presence of its parents in order to receive the care that the child needs. In infants, this behavior is often seen when one cries because one is hungry and the parent responds by coming within one's proximity to feed them (Bowlby, 1982). Orzolek-Kronner (2002) notes that anorexia nervosa may actually be an extension of this proximity-seeking behavior into adolescence as the adolescent self-starvation may be synonymous to an infant cry for the parent to help feed the child. To explore this idea this researcher created the Proximity-Seeking Scale (PSS), which measures feelings of closeness both before and after the onset of anorexia nervosa. He found that many anorexics reported feeling closer to parents after the onset of the disorder. Connections between this finding and previous findings were drawn. Earlier research illustrates the association between anorexia nervosa and estranged parental attachment styles (Canetti et al. 2008; Laporte & Guttman, 2007; Leung et al., 2000; Patching & Lawler, 2008; Swanson et al., 2009). Thus, Orzolek-Kronner (2002) proposes that perhaps the disorder is an attempt by the child to strengthen and improve the relationships they share with their parents.

Mediators between Parent-Child Attachment and Anorexia

In sum, the aforementioned research on parental connectedness, care, and control illustrate trends that suggest that parent-child attachment is associated with anorexia nervosa (Canetti et al., 2008; Laporte & Guttman, 2007; Leung et al., 2000; Orzolek-Kronner, 2002; Patching & Lawler, 2008; Swanson et al., 2009). A handful of researchers, however, have noted these trends and suggested the possibility of other potential mediating variables for the relation between parental-attachment and anorexia nervosa (Cnattingius, Hultman, Dhal, & Sparen, 1999; Foley, Thacker, Aggen, Neale, & Kendler, 2001; Gorman & Gorman, 2004; Leung et al., 2000; Patching & Lawler, 2008; Steiger, Van der Feen, Goldstein, & Leichner, 1989; Wade, Treloar, Martin, Statham, & Health, 2004).

One potential mediating variable is unrealistic expectations. Patching and Lawler (2008) conducted semi-structured interviews with women who had previously struggled with, but since recovered from anorexia nervosa. These researchers found that unrealistic expectations were a common theme throughout the lives of the women interviewed. Many of the women mentioned that parents continuously imposed unrealistic expectations upon them and expected the women to meet them in a precise and rigid-like fashion. Leung et al. (2000) suggest that as a result of these expectations imposed upon them in the context of an already insecure parent-child relationship, the anorexics begin to view themselves as defective because they cannot reach the set expectations and sometimes set even higher unrealistic expectations for themselves as an attempt to compensate. Therefore, parental attachment appears to be related indirectly to the manifestation of the disorder by way of the unrealistic expectations that it creates.

Core beliefs have also been researched as a mediator between attachment and anorexia. Core beliefs can be defined as, "the very essence of how we see ourselves, other people, the world, and the future....and are strongly-held, rigid...and [ignore] evidence that contradicts [them]" (The Centre for Clinical Interventions, 2007). Many times core beliefs are created and maintained from an early age (Leung et al., 2000). Thus, the formation of such beliefs occurs with the formation of attachment of parent and child. It is also imperative to note that core beliefs are powerful predictors of an individual's behavior. Leung et al. (2000) found that the associations between parental bonding and core beliefs were significantly higher for anorexics than it was for the non-clinical sample. Accordingly, it can be suggested that parental

attachment relations may only indirectly influence the manifestation of anorexia nervosa as the core beliefs which parental attachment help to create may more directly influence the manifestation of the disorder.

Another variable explored was the idea of defense styles, or defense mechanisms. These can be described as "managers of intrapsychic stress," or the way in which an individual comes to cope with the daily stressors in life (Nasserbakht, Arajoo, & Steiner, 1996, p.4). According to Hentschel (2004), defense styles can be classified as distinct types. Primitive and immature defenses are those that are maladaptive and are characterized by projection, denial, acting out, aggressive behavior, etc. Neurotic and mature defenses are more adaptive and characterized by behavior such as intellectualization, repression, humor, sublimation. For instance, Steiger et al. (1989) investigated how defense styles may interact with parental attachment in the manifestation of anorexia nervosa. They administered the PBI as well as the Bond Defense Style Questionnaire, which measures defense styles on a continuum from primitive to mature, to both a sample diagnosed with eating disorders and a non-clinical sample (Steiger et al., 1989). The researchers found more use of primitive defense styles and weaker sense of parental bonding among the anorexic patients in contrast to more use of mature defense styles and a stronger sense of parental bonding among the non-clinical sample. These findings suggest that defense styles are formed at an early age, which is the same time parental attachments are formed. Thus, the creation of the defense styles may be mediated by parental attachment (Steiger et al., 1989). Therefore, the parental attachment may be indirectly related to the manifestation of the disorder by way of defense styles.

The Role of Genetics in Anorexia Nervosa

In addition to various mediators between parental attachment and anorexia nervosa, research has shown that genetics plays a role in the onset of anorexia nervosa. In a study of female monozygotic and dizygotic twins, one research team found that 37% of genetic risk factors overlapped with intentional weight loss, whereas only 6% of environmental factors overlapped with intentional weight loss (Wade, Treloar, Heath, & Martin, 2009). In another more specific study, the same research team found that when compared with their non-anorexic twins, anorexics had a significantly higher birth weight and at present a significantly lower BMI value (Wade et al., 2004). In addition, countless other researchers have found genetic factors that are significantly associated with anorexia nervosa. For example, pre-term births and lower gestational ages are associated with the disorder as well as neurobiological

factors (Cnattingius et al., 1999; Gorman & Gorman, 2004). Hence, this research highlights how parents matter not just by virtue of the quality of their caregiving, but also by the genetics they contribute to the child. Clearly, there is likely interplay between genetics and the environment that appears to contribute to the manifestation of anorexia. Future research into this complex interaction of nature and nurture is needed to clarify the pathways.

Discussion

Limitations and Future Research

In sum, the majority of the research to date acknowledges the idea that the environment, and specifically parental attachment, is associated with the manifestation of anorexia nervosa (Canetti et al., 2008; Laporte & Guttman, 2007; Leung et al., 2000; Orzolek-Kronner, 2002; Patching & Lawler, 2008; Swanson et al., 2009). Research has highlighted mediators between parent-child attachment and anorexia as well as the role of genetics (Cnattingius et al., 1999; Gorman & Gorman, 2004; Leung et al., 2000; Patching & Lawler, 2008; Steiger et al., 1989; Wade et al., 2004). However, despite the quality and quantity of research done, there are still numerous limitations to consider.

Primarily, the samples that were chosen were extremely limited. Most studies were conducted with samples with all or mostly all women (Leung et al., 2000; Orzolek-Kronner, 2002; Patching & Lawler, 2008; Steiger et al., 1989). Although anorexia is more prevalent among women as about 1,800,000 are currently diagnosed with the disorder, there are about 200,000 men diagnosed with the disorder as the ratio of men to women with anorexia is about 1:9 (Epling & Pierce, 1996). Thus, as a population of anorexic men exists it is imperative to investigate the factors associated with the disorder. It has been noted that anorexia most often manifests itself in men who engage in competitive training and weight reduction (Epling & Pierce, 1996). However, it also would be valuable to explore if attachment styles are associated with the disorder in the same way for men as they are for women. Such differences are expected since men are more likely to be avoidant in attachment styles and have a fear of intimacy compared to women (Gormley & Lopez, 2010; Mikulincer & Goodman, 2006). In addition, researchers have suggested that the attachment styles themselves may differ in their effect on emotions for men and women. For example, men may be more likely to have fearful avoidance in relation to fear and contempt than are women (Consedine & Fiori, 2009). Therefore, an investigation on the parental attachment styles and their effect on

non-clinical men and anorexic men may provide more of an understanding into the manifestation of the disorder in this population.

In addition, most of the studies were conducted using subjective self-report measures (Canetti et al., 2008; Laporte & Gutman, 2007; Leung et al., 2000; Orzolek-Kronner, 2002; Swanson et al., 2009). The use of these subjective measures assume that the respondents can "assess and accurately report" about themselves (Phye, 1997, p. 209). Self-report measures are easily influenced by "mood, social desirability, and other contextual factors" (Phye, 1997, p. 209). Therefore, it is possible that many patients may provide inaccurate reports on such measures and the data may not be as robust as would be preferred. In continuance, many of the studies used the PBI to measure parental connectedness, care, and control (Canetti et al., 2008; Gorman & Gorman, 2004; Leung et al., 2000; Steiger et al., 1989; Swanson et al., 2010). Though this measure has sound reliability and validity, there may be limits on the type of information gained from use of just one instrument. In addition, this inventory was designed to measure parental care and control; however, researchers also used it to measure parental closeness, for which it was not designed (Parker, 1979). Thus, the data provided may not yield the most accurate results.

Hence, it may be helpful to utilize a wider range of resources to obtain data. Interviews allow for the participant to elaborate about their responses, and may allow for the researcher to obtain greater understanding about the attachment styles and their relationship with anorexia nervosa (Knight & Ruddock, 2008). In addition, it may be beneficial to have multiple informants on attachment style for each individual with anorexia nervosa as it may be beneficial to examine how the parents viewed their parenting style, how the child received it, and how it all is related to the disorder (Knight & Ruddock, 2008). Following, the PBI was designed to measure parental care and control, but not parental connectedness (Parker, 1979). Therefore, it may benefit a research team to design an instrument to measure parental connectedness specifically as there does not seem to be many established measures for this specific construct. A more specific instrument may yield more accurate data (Weiner & Craighead, 2010).

Also, all studies done were correlational or descriptive and examined the relationships between various factors and anorexia nervosa (Canetti et al., 2008; Gorman & Gorman, 2004; Laporte & Guttman, 2007; Leung et al., 2000; Orzolek-Kronner, 2002; Patching & Lawler, 2008; Steiger et al., 1989; Swanson et al., 2010). However, no direct cause and effect

relationships can be drawn from the research because of the lack of experimentation and manipulation. However, this seems to be a limitation that future research cannot address as there is no known ethical way to experiment with these constructs (Coon & Mitterer, 2009)

In addition, much of the research focused on parental attachment and its effects on the manifestation of the disorder (Canetti et al., 2008; Laporte & Guttman, 2007; Leung et al., 2000; Orzolek-Kronner, 2002; Patching & Lawler, 2008; Swanson et al., 2009). Therefore, the studies at present seem to lack information on the other attachment relationships in which the individual engages, such as with siblings, a romantic partner, or friends and how that effects the manifestation of the disorder. Attachment theory speaks to the idea that early parental attachments help the child to create a "working model" to help predict and interpret others' behaviors. Thus, the type of attachment style between parent and child seems to influence heavily the attachment style between child and others (Le Poire, 2006). However, some researchers suggest that the attachment styles fostered between the child and parents and the child and others actually differ. For example, in regards to romantic relations Fiske, Gilbert, and Lindzey (1976) suggest that "parent-child bonds and romantic bonds solve different adaptive problems [so] there are important differences in the decision making biases governing attachments to children and lovers" (p. 776). Similarly, Furman and Brown (1999) propose that because other social relationships differ from the parental-child relationship, there are clear differences in the representations of the relationships and the influence they have over the individual. Hence, although traditional thought proposes parental relationships form a basis for other relationships, it is now thought that other relationships may be different and thus may require separate exploration and examination in their association with anorexia nervosa.

Implications

The results of the research conducted and the future research to be conducted have major implications for society at large. As stated, much research emphasizes the idea that low parental care and high parental control are associated with anorexia nervosa (Canetti et al., 2008; Laporte & Guttman, 2007; Leung et al., 2000; Orzolek-Kronner, 2002; Patching & Lawler, 2008; Swanson et al., 2009). Therefore, it may be helpful to launch awareness campaigns that target the parents of elementary school children. As Birmingham and Treasure (2010) state, anorexia nervosa is most often diagnosed in adolescence. Thus, targeting parents of children of a

younger age may help to prevent the disorder from manifesting. More specifically, the awareness campaigns could be two-pronged as they can both inform and educate the parents of these young children. To inform the parents, the campaigns can present the research cited in this review, and explain how low levels of parental care and high levels of parental control are associated with maladjustment in adolescence, especially anorexia nervosa. Hence, the campaigns must not only inform the parents about the statistical links between the constructs, but also educate them on how specifically to foster a secure attachment with their child to aid healthy development in adolescence. Therefore, the campaign could recognize the actions which foster secure attachments by noting that showing interest in the child, recognizing the child's needs, and accepting the child all helps to do so (Iwaniec, 2006). In a more specific and applicable fashion, perhaps the parents could attend a workshop or any intervention program (for a review see Levy, 2000) as part of the campaign to apply what they know to real-life situations as application helps individuals to integrate their knowledge better. The parents would role play different scenarios such as a child being different from their expectations, a child wanting to engage in one healthy activity while the parent wants them to engage in another, etc. They could learn how different ways of coping with these situations would result in different consequences such as when they give the child an appropriate amount of autonomy the child becomes more secure as an individual and more secure within the attachment relationship (Zimmerman et al., 2009).

Furthermore, these findings have implications for elementary school-aged children as well. According to Komiskey (2001), interventions for eating disorders in particular improve global self-esteem, body self-esteem, and may act as a preventative barrier. Thus, the children could take the PBI to be screened to compare their response patterns to the response patterns common in anorexia nervosa which tend to illustrate low levels of parental care and high levels of parental control (Canetti et al., 2008; Laporte & Guttman, 2007; Leung et al., 2000; Orzolek-Kronner, 2002; Patching &

Lawler, 2008; Swanson et al., 2009). If the patterns are similar, a psychological intervention could take place. The intervention could inform the child about the associations between the patterns they displayed on the PBI and anorexia nervosa. Furthermore, the intervention could address specific coping mechanisms for dealing with issues of personal autonomy, estrangement and isolation, etc. Also, fostering a sense of self-confidence would aid in the young child's adjustment (Diehl & Hay, 2010). As the U.S. Library of Medicine (2005) emphasizes, it is imperative to include when necessary and possible to aid in this process of intervention.

Conclusion

In sum, anorexia nervosa effects a multitude of young men and women (Birmingham & Treasure, 2010; Epling & Pierce, 1996), and causes painstaking physical effects, and can even result in death (Birmingham & Treasure, 2010). Research shows that certain types of parent-child attachment are associated with the disorder as low levels of care and high levels of control are usually displayed in the parents of those with the disorder (Canetti et al., 2008; Laporte & Guttman, 2007; Leung et al., 2000; Orzolek-Kronner, 2002; Patching & Lawler, 2008; Swanson et al., 2009). Furthermore, the interaction between attachment styles and proximity-seeking behaviors, unrealistic expectations, core beliefs, genetics, and defense styles has been examined in association with the disorder (Cnatingius et al., 1999; Foley et al., 2001; Gorman & Gorman, 2004; Leung et al., 2000; Patching & Lawler, 2008; Steiger et al., 1989; Wade et al., 2004). Though the research on men with anorexia and anorexics' relationships with those aside from parents is limited, the aforementioned research is robust and clear. As a result of knowing the factors associated with the disorder, prevention strategies must be implemented and target both parents and children while doing so. These types of strategies may improve the prognosis or prevent the disorder from occurring at all (U.S. Library of Medicine, 2005).

References

- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment*. Hillsdale, NJ: Erlbaum.
- Barber, B.K., & Mikles-Schluterman, J.M. (2008). Connectedness in the lives of children and adolescents: A call for greater conceptual clarity. *Journal of Adolescent Health, 43*(3), 209-216.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York, NY: Basic Books.
- Birmingham, C., & Treasure, J. (2010). *Medical management of eating disorders*. New York, NY: Cambridge University Press.
- Calam, R., Waller, G., Slade, P. D., & Newton, T. (1990). Eating disorders and perceived relationships with parents. *International Journal of Eating Disorders, 9*(5), 479-485. doi:10.1002/1098-108X(199009)9:5<479::AID-EAT2260090502>3.0.CO;2-I

- Canetti, L., Kanyas, K., Lerer, B., Latzer, Y., & Bachar, E. (2008). Anorexia nervosa and parental bonding: The contribution of parent-grandparent relationships to eating disorder psychopathology. *Journal of Clinical Psychology*, 64(6), 703-716. doi:10.1002/jclp.20482
- Cassidy, J., & Shaver, P. R. (2008). *Handbook of attachment: Theory, research, and clinical implications* (2nd ed.). New York, NY: Guilford.
- Cavendish, M. (2008). *Diseases and disorders*. Tarrytown, NY: Marshall Cavendish Cooperation.
- Chambers, J. A., Power, K. G., & Durham, R. C. (2004). Parental styles and long-term outcome following treatment for anxiety disorders. *Clinical Psychology & Psychotherapy*, 11(3), 187-198. doi:10.1002/cpp.406
- Cnattingius, S., Hultman, C. M., Dahl, M., & Sparén, P. (1999). Very preterm birth, birth trauma, and the risk of anorexia nervosa among girls. *Archives of General Psychiatry*, 56(7), 634-638. doi:10.1001/archpsyc.56.7.634
- Consedine, N. S., & Fiori, K. L. (2009). Gender moderates the associations between attachment and discrete emotions in late middle age and later life. *Aging & Mental Health*, 13(6), 847-862. doi:10.1080/13607860903046545
- Coon, D., & Mitterer, J.O. (2009). *Psychology: Modules for active learning* (pp. 48-50). Belmont, CA: Thomson.
- Diehl, M., & Hay, E. L. (2010). Risk and resilience factors in coping with daily stress in adulthood: The role of age, self-concept incoherence, and personal control. *Developmental Psychology*, 46(5), 1132-1146. doi:10.1037/a0019937
- Elder, R., Evans, K., & Nizette, D. (2009). *Psychiatric and mental health nursing* (pp. 330-332). Chatswood, Australia: Elsevier.
- Epling, F., & Pierce, D. (1996). *Activity anorexia: Theory, research, and treatment* (pp. 126). Mahwah, NJ: Lawrence Erlbaum Associates.
- Fiske, S.T., Gilbert, D.T., & Lindzey, G. (1976). *Handbook of social psychology* (pp. 776-777). Hoboken, NJ: John Wiley & Sons, Inc.
- Furman, W., & Benson, B. (1999). *The development of romantic relationships in adolescence* (pp. 85). Madrid, Spain: Cambridge University Press.
- Gormley, B., & Lopez, F. G. (2010). Authoritarian and homophobic attitudes: Gender and adult attachment style differences. *Journal of Homosexuality*, 57(4), 525-538. doi:10.1080/00918361003608715
- Gorman, S. E., & Gorman, J. M. (2004). Beyond misconceptions: Neurobiological and genetic associations in eating disorders. *CNS Spectrums*, 9(7), Retrieved from EBSCOhost.
- Hentschel, U. (2004). *Defense mechanisms: Theoretical, research, and clinical perspectives* (pp. 46). Amsterdam, Holland: Elsevier.
- Iwaniec, D. (2006). *The emotionally abused and neglected child: Identification, assessment, and intervention*. West Sussex, UK: Wiley.
- Knight, A., & Ruddock, L. (2008). *Advanced research methods in the built environment* (pp. 113). West Sussex, UK: Blackwell.
- Laporte, L., & Guttman, H. (2007). Recollections of parental bonding among women with borderline personality disorder as compared with women with anorexia nervosa and a control group. *Australian Journal of Psychology*, 59(3), 132-139. doi: 10.1080/00049530701449463
- Le Poire, B.A. (2006). *Family communication: Nurturing and control in a changing world* (pp. 93). Oaks, CA: Sage.
- Levy, T. R. (2000). *Handbook of attachment interventions*. San Diego, CA: Academic Press.
- Leung, N., Thomas, G., & Waller, G. (2000). The relationship between parental bonding and core beliefs in anorexic and bulimic women. *British Journal of Clinical Psychology*, 39(2), 205-213. doi:10.1348/014466500163220
- Mikulincer, M., & Goodman, G. S. (2006). *Dynamics of romantic love: Attachment, caregiving, and sex* (pp. 137). New York, NY: Guilford.
- Nasserbakht, A., Araujo, K., & Steiner, H. (1996). A comparison of adolescent and adult defense styles. *Child Psychiatry and Human Development*, 27(1), 3-14. doi:10.1007/BF02353442
- Orzolek-Kronner, C. (2002). The effect of attachment theory in the development of eating disorders: Can symptoms be proximity seeking?. *Child and Adolescent Social Work Journal*, 19(6), Retrieved from EBSCOhost.
- Parker, G., Tupling, H., & Brown, L.B. (1979). A parental bonding instrument. *British Journal of Medical Psychology*, 52(1), 1-10.
- Patching, J., & Lawler, J. (2009). Understanding women's experiences of developing an eating disorder and recovering: A life-history approach. *Nursing Inquiry*, 16(1), 10-21. doi:10.1111/j.1440-1800.2009.00436.x
- Phye, G. (1997). *Handbook of classroom assessment: Learning, achievement, and adjustment* (pp. 208-211). San Diego, CA: Academic Press.
- Polivy, J., & Herman, C. (2002). Causes of eating disorders. *Annual Review of Psychology*, 53(1), 187-213. doi:10.1146/annurev.psych.53.100901.135103
- Slavik, H. (2004). *Intercultural communication and diplomacy*. (pp. 143-144). Msido, Malta: DiploFoundation.
- Steiger, H., Van der Feen, J., Goldstein, C., & Lechner, P. (1989). Defense styles and parental bonding in eating-disordered women. *International Journal of Eating Disorders*, 8(2), 131-140. doi:10.1002/1098-108X(198903)8:2<131::AID-EAT2260080202>3.0.CO;2-K
- Swanson, H., Power, K., Collin, P., Deas, S., Paterson, G., Grierson, D., & Taylor, L. (2010). The relationship between parental bonding, social problem solving and eating pathology in an anorexic inpatient sample. *European Eating Disorders Review*, 18(1), 22-32. doi:10.1002/erv.967
- The Centre for Clinical Interventions. (2007). *Core Beliefs*. Retrieved April 12, 2011, from <http://www.cci.health.wa.gov.au/docs/ACF3B8A.pdf>

- U.S. Library of Medicine. (2005). *Eating disorders can be prevented*. Retrieved April 14, 2011, from <http://www.nlm.nih.gov/medlineplus/eatingdisorders.html#cat11>
- Wade, T. D., Treloar, S. A., Heath, A. C., & Martin, N. G. (2009). An examination of the overlap between genetic and environmental risk factors for intentional weight loss and overeating. *International Journal of Eating Disorders*, 42(6), 492-497. doi:10.1002/eat.20668
- Wade, T. D., Treloar, S. A., Martin, N. G., Statham, D., & Heath, A. C. (2004). Monozygotic twin pairs discordant for lifetime anorexia nervosa: An exploratory investigation. *Australian Journal of Psychology*, 56(2), 127-132. doi:10.1080/00049530410001734810
- Weiner, I.B., & Craighead, E. (Eds.). (2010). *The Corsini encyclopedia of psychology* (4th ed., Vols. M-Q). Hoboken, NJ: Wiley.
- Winkler, D.W. (1987). A general model for parental care. *The American Naturalist*, 130(4), 526-543.
- Zimmermann, P., Mohr, C., & Spangler, G. (2009). Genetic and attachment influences on adolescents' regulation of autonomy and aggressiveness. *Journal of Child Psychology and Psychiatry*, 50(11), 1339-1347. doi:10.1111/j.1469-7610.2009.02158.x
-